

THE STATE OF TEXAS

BID # L25235

ORDINANCE # 2015-0973

COUNTY OF HARRIS

CONTRACT # 4600013367

I. PARTIES

1.0 ADDRESS:

THIS AGREEMENT FOR LARGE SUBMERSIBLE PUMP REPAIR SERVICES ("Agreement") is made on the Countersignature Date between the **CITY OF HOUSTON, TEXAS** ("City"), a Texas Home-Rule City and **Coastal Pump Services, Inc.** ("Contractor or Vendor"), a corporation doing business in Texas.

The initial addresses of the parties, which one party may change by giving written notice to the other party, are as follows:

City

City Purchasing Agent for Director
Public Works & Engineering Department
City of Houston
P.O. Box 1562
Houston, Texas 77251

Contractor

Coastal Pump Services, Inc.
6025 CR 48
Manvel, TX 77578
Phone: 281-489-3300
Fax: 281-489-3500

The Parties agree as follows:

2.0 TABLE OF CONTENTS:

2.1 This Agreement consists of the following sections:

TABLE OF CONTENTS

Page No.

I. PARTIES	1
1.0 ADDRESS:	1
2.0 TABLE OF CONTENTS:	1
3.0 PARTS INCORPORATED:	3
4.0 CONTROLLING PARTS:	3
5.0 DEFINITIONS:	3
6.0 SIGNATURES:	4
II. DUTIES OF CONTRACTOR.....	5
1.0 SCOPE OF SERVICES:	5
2.0 INDEMNITY AND RELEASE:	5
2.2 INDEMNIFICATION:	5
2.3 INDEMNIFICATION:	6
3.0 INDEMNIFICATION PROCEDURES:	6
4.0 INSURANCE:	6
5.0 WARRANTIES:	7
6.0 LICENSES AND PERMITS:	8
7.0 COMPLIANCE WITH EQUAL OPPORTUNITY ORDINANCE:	8
8.0 MWBE COMPLIANCE:	8
9.0 DRUG ABUSE DETECTION AND DETERRENCE:	8
10.0 ENVIRONMENTAL LAWS:	9
12.0 PAYMENT OF EMPLOYEES AND SUBCONTRACTORS:	9
13.0 CONTRACTOR PAY OR PLAY PROGRAM:	9
III. DUTIES OF CITY.....	10
1.0 PAYMENT TERMS:	10
2.0 TAXES:	10
3.0 METHOD OF PAYMENT:	10
4.0 METHOD OF PAYMENT - DISPUTED PAYMENTS:	10
5.0 LIMIT OF APPROPRIATION:	10
6.0 CHANGES:	11
IV. TERM AND TERMINATION	12
1.0 CONTRACT TERM:	12
2.0 NOTICE TO PROCEED:	12
3.0 RENEWALS:	12
4.0 TIME EXTENSIONS:	12
5.0 TERMINATION FOR CONVENIENCE BY THE CITY:	12
6.0 TERMINATION FOR CAUSE BY CITY:	13
7.0 TERMINATION FOR CAUSE BY CONTRACTOR:	13
8.0 REMOVAL OF CONTRACTOR OWNED EQUIPMENT AND MATERIALS:	13
V. MISCELLANEOUS.....	14
1.0 INDEPENDENT CONTRACTOR:	14
2.0 FORCE MAJEURE:	14

3.0	SEVERABILITY:	14
4.0	ENTIRE AGREEMENT:	14
5.0	WRITTEN AMENDMENT:	14
6.0	APPLICABLE LAWS:	14
7.0	NOTICES:	15
8.0	NON-WAIVER:	15
9.0	INSPECTIONS AND AUDITS:	15
10.0	ENFORCEMENT:	15
11.0	AMBIGUITIES:	15
12.0	SURVIVAL:	15
13.0	PARTIES IN INTEREST:	15
14.0	SUCCESSORS AND ASSIGNS:	16
15.0	BUSINESS STRUCTURE AND ASSIGNMENTS:	16
16.0	REMEDIES CUMULATIVE:	16
17.0	CONTRACTOR DEBT:	16

EXHIBITS

- A. DEFINITIONS
- B. SCOPE OF SERVICES
- B1-12. FORMS
- C. EQUAL EMPLOYMENT OPPORTUNITY
- D. MWBE SUBCONTRACT TERMS
- E. DRUG POLICY COMPLIANCE AGREEMENT
- F. CERTIFICATION OF NO SAFETY IMPACT POSITIONS
- G. DRUG POLICY COMPLIANCE DECLARATION
- H. FEES AND COSTS
- I. CONTRACTOR PAY OR PLAY

3.0 PARTS INCORPORATED:

3.1 The above described sections and exhibits are incorporated into this Agreement.

4.0 CONTROLLING PARTS:

4.1 If a conflict among the sections or exhibits arises the Exhibits control over the Sections.

5.0 DEFINITIONS:

5.1 Certain terms used in this Agreement are defined in Exhibit "A".

6.0 **SIGNATURES:**

6.1 The Parties have executed this Agreement in multiple copies, each of which is an original.

ATTEST/SEAL (if a corporation):

Coastal Pump Services, Inc.

WITNESS (if not a corporation):

By: _____

Name:

Title:

By: Randy Bridges

Name: Randy Bridges

Title: Owner

Federal Tax ID Number: 76-0658294

ATTEST/SEAL:

CITY OF HOUSTON, TEXAS

Signed by:

Arshia D. Parker
Amanda Washington

Mayor

APPROVED:

COUNTERSIGNED BY:

Ronald C. Shro
Jerome Park

City Controller

DATE COUNTERSIGNED:

10-20-15

This Contract has been reviewed as to form by the undersigned legal assistant and has been found to meet established Legal Department criteria. The Legal Department has not reviewed the content of these documents.

10-7-2015

Date

D. Gray

Legal Assistant

II. DUTIES OF CONTRACTOR

1.0 SCOPE OF SERVICES:

- 1.1 In consideration of the payments specified in this Agreement, Contractor shall provide all labor, material, equipment, transportation and supervision necessary to provide the services/supplies described in Exhibit "B".

2.0 INDEMNITY AND RELEASE:

2.1 RELEASE

PRIME CONTRACTOR/SUPPLIER AGREES TO AND SHALL RELEASE THE CITY, ITS AGENTS, EMPLOYEES, OFFICERS, AND LEGAL REPRESENTATIVES (COLLECTIVELY THE CITY) FROM ALL LIABILITY FOR INJURY, DEATH, DAMAGE, OR LOSS TO PERSONS OR PROPERTY SUSTAINED IN CONNECTION WITH OR INCIDENTAL TO PERFORMANCE UNDER THIS AGREEMENT, EVEN IF THE INJURY, DEATH, DAMAGE, OR LOSS IS CAUSED BY THE CITY'S SOLE OR CONCURRENT NEGLIGENCE AND/OR THE CITY'S STRICT PRODUCTS LIABILITY OR STRICT STATUTORY LIABILITY.

2.2 INDEMNIFICATION:

PRIME CONTRACTOR/SUPPLIER AGREES TO AND SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY, ITS AGENTS, EMPLOYEES, OFFICERS, AND LEGAL REPRESENTATIVES (COLLECTIVELY "THE CITY") HARMLESS FOR ALL CLAIMS, CAUSES OF ACTION, LIABILITIES, FINES, AND EXPENSES (INCLUDING, WITHOUT LIMITATION, ATTORNEY'S FEES, COURT COSTS, AND ALL OTHER DEFENSE COSTS AND INTEREST) FOR INJURY, DEATH, DAMAGE, OR LOSS TO PERSONS OR PROPERTY SUSTAINED IN CONNECTION WITH OR INCIDENTAL TO PERFORMANCE UNDER THIS AGREEMENT INCLUDING, WITHOUT LIMITATION, THOSE CAUSED BY:

- 2.2.1 PRIME CONTRACTOR/SUPPLIERS AND/OR ITS AGENTS', EMPLOYEES', OFFICERS', DIRECTORS', CONTRACTORS', OR SUBCONTRACTORS' (COLLECTIVELY IN NUMBERED PARAGRAPHS 2.1-2.3, "PRIME CONTRACTOR/SUPPLIER") ACTUAL OR ALLEGED NEGLIGENCE OR INTENTIONAL ACTS OR OMISSIONS;
- 2.2.2 THE CITY'S AND PRIME CONTRACTOR/SUPPLIER'S ACTUAL OR ALLEGED CONCURRENT NEGLIGENCE, WHETHER PRIME CONTRACTOR/SUPPLIER IS IMMUNE FROM LIABILITY OR NOT; AND
- 2.2.3 THE CITY'S AND PRIME CONTRACTOR/SUPPLIER'S ACTUAL OR ALLEGED STRICT PRODUCTS LIABILITY OR STRICT STATUTORY LIABILITY, WHETHER PRIME CONTRACTOR/SUPPLIER IS IMMUNE FROM LIABILITY OR NOT.
- 2.2.4 PRIME CONTRACTOR/SUPPLIER SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY HARMLESS DURING THE TERM OF THIS AGREEMENT AND FOR FOUR YEARS AFTER THE AGREEMENT TERMINATES. PRIME CONTRACTOR/SUPPLIER'S INDEMNIFICATION IS LIMITED TO \$500,000.00 PER OCCURRENCE. PRIME CONTRACTOR/SUPPLIER SHALL NOT INDEMNIFY THE CITY FOR THE CITY'S SOLE NEGLIGENCE.

2.3 INDEMNIFICATION:

CONTRACTOR SHALL REQUIRE ALL OF ITS SUBCONTRACTORS (AND THEIR SUBCONTRACTORS) TO RELEASE AND INDEMNIFY THE CITY TO THE SAME EXTENT AND IN SUBSTANTIALLY THE SAME FORM AS ITS RELEASE AND INDEMNITY TO THE CITY.

3.0 INDEMNIFICATION PROCEDURES:

3.1 Notice of Claims. If the City or Prime Contractor/Supplier receives notice of any claim or circumstances which could give rise to an indemnified loss, the receiving party shall give written notice to the other party within 10 days. The notice must include the following:

3.1.1 a description of the indemnification event in reasonable detail,

3.1.2 the basis on which indemnification may be due, and

3.1.3 the anticipated amount of the indemnified loss.

3.2 This notice does not stop or prevent the City from later asserting a different basis for indemnification or a different amount of indemnified loss than that indicated in the initial notice. If the City does not provide this notice within the 10 day period, it does not waive any right to indemnification except to the extent that Prime Contractor/Supplier is prejudiced, suffers loss, or incurs expense because of the delay.

3.3 Defense of Claims

3.3.1 Assumption of Defense. Prime Contractor/Supplier may assume the defense of the claim at its own expense with counsel chosen by it that is reasonably satisfactory to the City. Prime Contractor/Supplier shall then control the defense and any negotiations to settle the claim. Within 10 days after receiving written notice of the indemnification request, Prime Contractor/Supplier must advise the City as to whether or not it will defend the claim. If Prime Contractor/Supplier does not assume the defense, the City shall assume and control the defense, and all defense expenses constitute an indemnification loss.

3.3.2 Continued Participation. If Prime Contractor/Supplier elects to defend the claim, the City may retain separate counsel to participate in (but not control) the defense and to participate in (but not control) any settlement negotiations. Prime Contractor/Supplier may settle the claim without the consent or agreement of the City, unless it (i) would result in injunctive relief or other equitable remedies or otherwise require the City to comply with restrictions or limitations that adversely affect the City, (ii) would require the City to pay amounts that Prime Contractor/Supplier does not fund in full, (iii) would not result in the City's full and complete release from all liability to the plaintiffs or claimants who are parties to or otherwise bound by the settlement.

4.0 INSURANCE:

4.1 Contractor shall maintain in effect certain insurance coverage and shall furnish certificates of insurance, in duplicate form, before beginning its performance under this Agreement. All policies except Professional Liability and Workers' Compensation must name the City as an additional insured. The issuer of any policy (1) shall have a Certificate of Authority to transact insurance business in Texas or (2) shall be an eligible non-admitted insurer in the State of Texas and have a Best's rating of at least B+ and a Best's Financial Size Category of Class VI

or better, according to the most current edition Best's Key Rating Guide. Contractor shall maintain the following insurance coverages in the following amounts:

4.1.1 Commercial General Liability insurance including Contractual Liability insurance:
\$500,000 per occurrence; \$1,000,000 aggregate

4.1.2 Workers' Compensation including Broad Form All States endorsement:
Statutory amount

4.1.3 Automobile Liability insurance
\$1,000,000 combined single limit per occurrence
Defense costs are excluded from the face amount of the policy.
Aggregate Limits are per 12-month policy period unless otherwise indicated.

4.1.4 Employer's Liability
Bodily injury by accident \$100,000 (each accident)
Bodily injury by disease \$100,000 (policy limit)
Bodily injury by disease \$100,000 (each employee)

4.2 All insurance policies must require by endorsement, that the insurance carrier waives any rights of subrogation against the City. Contractor shall give written notice to the Director if any of its insurance policies are cancelled, materially changed or non-renewed. Within the 30 day period, Contractor shall provide other suitable policies in lieu of those about to be canceled, materially changed, or non-renewed so as to maintain in effect the required coverage. If Contractor does not comply with this requirement, the Director, at his or sole discretion, may:

4.2.1 immediately suspend Contractor from any further performance under this Agreement and begin procedures to terminate for default, or

4.2.2 purchase the required insurance with City funds and deduct the cost of the premiums from amounts due to Contractor under this Agreement.

4.2.3 All certificates of insurance submitted by Contractor shall be accompanied by endorsements for additional insured coverage in favor of the City for Commercial General Liability and Automobile Liability policies; and waivers of subrogation in favor of the City for Commercial General Liability, Automobile Liability, and Worker's Compensation/Employers' Liability policies. For a list of pre-approved endorsement forms see <http://purchasing.houstontx.gov/forms.shtml>. The Director will consider all other forms on a case-by-case basis.

5.0 WARRANTIES:

5.1 Contractor represents and warrants that it shall perform all work in a good and workmanlike manner, meeting the standards of quality prevailing in Harris County, Texas for work of this kind. Contractor shall perform all work using trained and skilled persons having substantial experience performing the work required under this Agreement.

5.2 With respect to any parts and goods furnished by it, Contractor warrants:

5.2.1 that all items are free of defects in title, material, and workmanship,

5.2.2 that each item meets or exceeds the manufacturer's specifications and requirements for the equipment, structure, or other improvement in which the item is installed,

5.2.3 that each replacement item is new in accordance with original equipment manufacturer's specifications, and of a quality at least as good as the quality of the item which it replaces (when the replaced item was new), and

5.2.4 that no item or its use infringes any patent, copyright, or proprietary right.

6.0 LICENSES AND PERMITS:

- 6.1 Contractor shall obtain and pay for all licenses, permits, and certificates required by any statute, ordinance, rule, or regulation.

7.0 COMPLIANCE WITH EQUAL OPPORTUNITY ORDINANCE:

- 7.1 Contractor shall comply with the City's Equal Employment Opportunity Ordinance as set out in Exhibit "C."

8.0 MWBE COMPLIANCE:

- 8.1 Contractor shall comply with the City's Minority and Women Business Enterprise ("MWBE") programs as set out in Chapter 15, Article V of the City of Houston Code of Ordinances. Contractor shall make good faith efforts to award subcontracts or supply agreements in at least **8%** of the value of this Agreement to MWBEs. Contractor acknowledges that it has reviewed the requirements for good faith efforts on file with the City's Office of Business Opportunity ("OBO"), and will comply with them.

- 8.2 M/WBE subcontracts must contain the Terms set out in Exhibit D.

9.0 DRUG ABUSE DETECTION AND DETERRENCE:

- 9.1 It is the policy of the City to achieve a drug-free workforce and workplace. The manufacture, distribution, dispensation, possession, sale, or use of illegal drugs or alcohol by contractors while on City Premises is prohibited. Contractor shall comply with all the requirements and procedures set forth in the Mayor's Drug Abuse Detection and Deterrence Procedures for Contractors, Executive Order No. 1-31 ("Executive Order"), which is incorporated into this Agreement and is on file in the City Secretary's Office.
- 9.2 Before the City signs this Agreement, Contractor shall file with the Contract Compliance Officer for Drug Testing ("CCODT"):
- 9.2.1 a copy of its drug-free workplace policy,
 - 9.2.2 the Drug Policy Compliance Agreement substantially in the form set forth in Exhibit "E," together with a written designation of all safety impact positions and,
 - 9.2.3 if applicable (e.g. no safety impact positions), the Certification of No Safety Impact Positions, substantially in the form set forth in Exhibit "F."
- 9.3 If Contractor files a written designation of safety impact positions with its Drug Policy Compliance Agreement, it also shall file every 6 months during the performance of this Agreement or on completion of this Agreement if performance is less than 6 months, a Drug Policy Compliance Declaration in a form substantially similar to Exhibit "G." Contractor shall submit the Drug Policy Compliance Declaration to the CCODT within 30 days of the expiration of each 6-month period of performance and within 30 days of completion of this Agreement. The first 6-month period begins to run on the date the City issues its Notice to Proceed or if no Notice to Proceed is issued, on the first day Contractor begins work under this Agreement.
- 9.4 Contractor also shall file updated designations of safety impact positions with the CCODT if additional safety impact positions are added to Contractor's employee work force.
- 9.5 Contractor shall require that its subcontractors comply with the Executive Order, and Contractor shall secure and maintain the required documents for City inspection.

10.0 ENVIRONMENTAL LAWS:

- 10.1 Contractor shall comply with all rules, regulations, statutes, or orders of the Environmental Protection Agency ("EPA"), the Texas Commission on Environmental Quality ("TCEQ"), and any other governmental agency with the authority to promulgate environmental rules and regulations ("Environmental Laws"). Contractor shall promptly reimburse the City for any fines or penalties levied against the City because of Contractor's failure to comply.
- 10.2 Contractor shall not possess, use, generate, release, discharge, store, dispose of, or transport any Hazardous Materials on, under, in, above, to, or from the site except in strict compliance with the Environmental Regulations. "Hazardous Materials" means any substances, materials, or wastes that are or become regulated as hazardous or toxic substances under any applicable federal, state, or local laws, regulations, ordinances, or orders. Contractor shall not deposit oil, gasoline, grease, lubricants or any ignitable or hazardous liquids, materials, or substances in the City's storm sewer system or sanitary sewer system or elsewhere on City Property in violation of the Environmental Laws.

11.0 CONTRACTOR'S PERFORMANCE:

- 11.1 Contractor shall make citizen satisfaction a priority in providing services under this Agreement. Contractor shall train its employees to be customer service-oriented and to positively and politely interact with citizens when performing contract services. Contractor's employees shall be clean, courteous, efficient, and neat in appearance and committed to offering the highest quality of service to the public. If, in the Director's opinion, Contractor is not interacting in a positive and polite manner with citizens, he or she shall direct Contractor to take all remedial steps to conform to these standards.

12.0 PAYMENT OF EMPLOYEES AND SUBCONTRACTORS:

- 12.1 Contractor shall make timely payments in accordance with applicable state and federal law to all persons and entities supplying labor, materials or equipment for the performance of this Agreement including Contractor's employees.
- 12.2 Failure of Contractor to pay its employees as required by law shall constitute a default under this contract for which the Contractor and its surety shall be liable on Contractor's performance bond if Contractor fails to cure the default as provided under this Agreement.
- 12.3 Contractor shall defend and indemnify the City from any claims or liability arising out of Contractor's failure to pay its subcontractors as required by law. Contractor shall submit disputes relating to payment of M/WBE subcontractors to arbitration in the same manner as any other disputes under the M/WBE subcontract.

13.0 CONTRACTOR PAY OR PLAY PROGRAM:

- 13.1 The requirement and terms of the City of Houston Pay or Play Policy, as set out in Executive Order 1-7, are incorporated into this Agreement for all purposes. Contractor has reviewed Executive Order 1-7 and shall comply with its terms and conditions as they are set out at the time of City Council approval of this Agreement. Exhibit "I".
- 13.2 The Pay or Play Program for various departments will be administered by the City of Houston Affirmative Action Division's designee and for a Department specific contract; the Department's designated contract administrator will administer the Pay or Play Program.

III. DUTIES OF CITY

1.0 PAYMENT TERMS:

- 1.1 The City shall pay and Contractor shall accept fees at the unit prices provided in Exhibit H for all services rendered and the Deliverables furnished by Contractor. The fees must only be paid from Allocated Funds, as provided below.
- 1.2 Any quantities of services or Deliverables shown in any part of this contract or its exhibits are estimated only and are not any guarantee that the City will not purchase more or less of those services or Deliverables. The City will pay only for the services or Deliverables actually ordered and only at the unit prices set out.
- 1.3 The City of Houston's standard payment term is to pay 30 days after receipt of invoice or of goods or services, whichever is later, according to the requirements of the Texas Prompt Payment Act (Tx. Gov't Code, Ch. 2251). However, the City will pay in less than 30 days in return for an early payment discount from vendor as follows:
 - Payment Time - 10 Days: 2% Discount
 - Payment Time - 20 Days: 1% Discount
- 1.4 If the City fails to make a payment according to the early payment schedule above, but does make the payment within the time specified by the Prompt Payment Act, the City shall not receive the discount, but shall pay no other penalty. When the payment date falls on a Saturday, Sunday, or official holiday when City offices are closed and City business is not expected to be conducted, payment may be made on the following business day.

2.0 TAXES:

- 2.1 The City is exempt from payment of Federal Excise and Transportation Tax and Texas Limited Sales and Use Tax. Contractor's invoices to the City must not contain assessments of any of these taxes. The Director will furnish the City's exemption certificate and federal tax identification number to Contractor if requested.

3.0 METHOD OF PAYMENT:

- 3.1 The City shall pay Contractor on the basis of invoices submitted by Contractor and approved by the Director, showing the specific tasks completed in the preceding month and the corresponding prices. The City shall make payments to Contractor at its address for notices within 30 days of receipt of an approved invoice.

4.0 METHOD OF PAYMENT - DISPUTED PAYMENTS:

- 4.1 If the City disputes any items in an invoice Contractor submits for any reason, including lack of supporting documentation, the Director shall temporarily delete the disputed item and pay the remainder of the invoice. The Director shall promptly notify Contractor of the dispute and request remedial action. After the dispute is settled, Contractor shall include the disputed amount on a subsequent regularly scheduled invoice or on a special invoice for the disputed item only.

5.0 LIMIT OF APPROPRIATION:

- 5.1 The City's duty to pay money to Contractor under this Agreement is limited in its entirety by the provisions of this Section.
- 5.2 In order to comply with Article II, Sections 19 and 19a of the City's Charter and Article

XI, Section 5 of the Texas Constitution, the City has appropriated and allocated the sum of **\$1,400,000.00** to pay money due under this Agreement (the "Original Allocation").

- 5.3 The City shall only be obligated to pay money under this Agreement when it issues a City Purchase Order to Contractor. Contractor shall not provide any goods or services to the City under this Agreement until it receives a Purchase Order for such goods or services, and City shall have no obligation to pay Contractor for any item or service it furnishes without first receiving a City Purchase order for same. The only exception to the policy stated before is that the City may pay Contractor with a City-authorized Procurement Card ("P-card"), which shall not require the prior issuance of a Purchase order. Contractor shall not proceed to furnish goods or services until it has verified that a P-card payment will be made.

6.0 CHANGES:

- 6.1 At any time during the Agreement Term, the City Purchasing Agent or Director may issue a Change Order to increase or decrease the scope of services or change plans and specifications, as he or she may find necessary to accomplish the general purposes of this Agreement. Contractor shall furnish the services or deliverables in the Change Order in accordance with the requirements of this Agreement plus any special provisions, specifications, or special instructions issued to execute the extra work.

- 6.2 The City Purchasing Agent or Director will issue the Change Order in substantially the following form:

CHANGE ORDER

TO: [Name of Contractor]
FROM: City of Houston, Texas (the "City")
DATE: [Date of Notice]
SUBJECT: Change Order under the Agreement between the City and [Name of Contractor] countersigned by the City Controller on [Date of countersignature of the Agreement]

Subject to all terms and conditions of the Agreement, the City requests that Contractor provide the following:

[Here describe the additions to or changes to the equipment or services and the Change Order Charges applicable to each.]

Signed:
[Signature of City Purchasing Agent or Director]

- 6.3 The City Purchasing Agent or Director may issue more than one Change Order, subject to the following limitations:
- 6.3.1 Council expressly authorizes the City Purchasing Agent or Director to approve a Change Order of up to \$50,000. A Change Order of more than \$50,000 over the approved contract amount must be approved by the City Council.
- 6.3.2 If a Change Order describes items that Contractor is otherwise required to provide under this Agreement, the City is not obligated to pay any additional money to Contractor.
- 6.3.3 The Total of all Change Orders issued under this section may not increase the Original Agreement amount by more than 25%.

- 6.4 Whenever Contractor receives a Change Order, Contractor shall furnish all material, equipment, and personnel necessary to perform the work described in the Change Order. Contractor shall complete the work within the time prescribed. If no time for completion is prescribed, Contractor shall complete the work within a reasonable time. If the work described in any Change Order causes an unavoidable delay in any other work Contractor is required to perform under this Agreement, Contractor may request a time extension for the completion of the work. The City Purchasing Agent's or Director's decision regarding a time extension is final.
- 6.5 A product or service provided under a Change Order is subject to inspection, acceptance, or rejection in the same manner as the work described in the Original Agreement, and is subject to the terms and conditions of the Original Agreement as if it had originally been a part of the Agreement.
- 6.6 Change Orders are subject to the Allocated Funds provisions of this Agreement.

IV. TERM AND TERMINATION

1.0 CONTRACT TERM:

- 1.1 This Agreement is effective on the Countersignature Date and expires three (3) years after the date specified in the Notice to Proceed unless sooner terminated according to the terms of this Agreement.

2.0 NOTICE TO PROCEED:

- 2.1 Contractor shall begin performance under this Agreement on the date specified in a Notice to Proceed from the City Purchasing Agent.

3.0 RENEWALS:

- 3.1 Upon expiration of the Initial Term, and so long as the City makes sufficient supplemental allocations, this Agreement will be automatically renewed for two successive one-year terms on the same terms and conditions. If the Director of the City Department elects not to renew this Agreement, the City Purchasing shall notify Contractor in writing of non-renewal at least 30 days before the expiration of the then-current term.

4.0 TIME EXTENSIONS:

- 4.1 If the Department requests an extension of time to complete its performance, then the City Purchasing Agent may, in his or her sole discretion, extend the time so long as the extension does not exceed 180 days. The extension must be in writing but does not require amendment of this Agreement. Contractor is not entitled to damages for delay(s) regardless of the cause of the delay(s).

5.0 TERMINATION FOR CONVENIENCE BY THE CITY:

- 5.1 The City Purchasing Agent or Director may terminate this Agreement at any time by giving 30 days written notice to Contractor. The City's right to terminate this Agreement for convenience is cumulative of all rights and remedies which exist now or in the future.
- 5.2 On receiving the notice, Contractor shall, unless the notice directs otherwise, immediately discontinue all services under this Agreement and cancel all existing orders and subcontracts that are chargeable to this Agreement. As soon as practicable after receiving the termination notice, Contractor shall submit an invoice showing in detail the services performed under this Agreement up to the termination date. The City shall then pay the fees to Contractor for services actually performed, but not already paid for, in the same manner as prescribed in Section III unless the fees exceed the allocated funds remaining under this Agreement.

- 5.3 TERMINATION OF THIS AGREEMENT AND RECEIPT OF PAYMENT FOR SERVICES RENDERED ARE CONTRACTOR'S ONLY REMEDIES FOR THE CITY'S TERMINATION FOR CONVENIENCE, WHICH DOES NOT CONSTITUTE A DEFAULT OR BREACH OF THIS AGREEMENT. CONTRACTOR WAIVES ANY CLAIM (OTHER THAN ITS CLAIM FOR PAYMENT AS SPECIFIED IN THIS SECTION), IT MAY HAVE NOW OR IN THE FUTURE FOR FINANCIAL LOSSES OR OTHER DAMAGES RESULTING FROM THE CITY'S TERMINATION FOR CONVENIENCE.

6.0 TERMINATION FOR CAUSE BY CITY:

- 6.1 If Contractor defaults under this Agreement, the City Purchasing Agent or Director may either terminate this Agreement or allow Contractor to cure the default as provided below. The City's right to terminate this Agreement for Contractor's default is cumulative of all rights and remedies which exist now or in the future. Default by Contractor occurs if:
- 6.1.1 Contractor fails to perform any of its duties under this Agreement;
 - 6.1.2 Contractor becomes insolvent;
 - 6.1.3 all or a substantial part of Contractor's assets are assigned for the benefit of its creditors;
or
 - 6.1.4 a receiver or trustee is appointed for Contractor.
- 6.2 If a default occurs, the City Purchasing Agent or Director may, but is not obligated to, deliver a written notice to Contractor describing the default and the termination date. The City Purchasing Agent or Director at his or her sole option, may extend the termination date to a later date. If the City Purchasing Agent or Director allows Contractor to cure the default and Contractor does so to the City Purchasing Agent's or Director's satisfaction before the termination date, then the termination is ineffective. If Contractor does not cure the default before the termination date, then the City Purchasing Agent or Director may terminate this Agreement on the termination date, at no further obligation of the City.
- 6.3 To effect final termination, the City Purchasing Agent or Director must notify Contractor in writing. After receiving the notice, Contractor shall, unless the notice directs otherwise, immediately discontinue all services under this Agreement, and promptly cancel all orders or subcontracts chargeable to this Agreement.

7.0 TERMINATION FOR CAUSE BY CONTRACTOR:

- 7.1 Contractor may terminate its performance under this Agreement only if the City defaults and fails to cure the default after receiving written notice of it. Default by the City occurs if the City fails to perform one or more of its material duties under this Agreement. If a default occurs and Contractor wishes to terminate the Agreement, then Contractor must deliver a written notice to the Director describing the default and the proposed termination date.
- 7.2 The date must be at least 30 days after the Director receives notice. Contractor, at its sole option, may extend the proposed termination date to a later date. If the City cures the default before the proposed termination date, then the proposed termination is ineffective. If the City does not cure the default before the proposed termination date, then Contractor may terminate its performance under this Agreement on the termination date.

8.0 REMOVAL OF CONTRACTOR OWNED EQUIPMENT AND MATERIALS:

- 8.1 Upon expiration, or termination of this Agreement, Contractor is permitted ten (10) days within which to remove contractor-owned material and equipment from the City's premises. The City shall make such material and equipment readily available to Contractor. The time period may be extended upon approval by the Director. The City reserves the right to deny any extension of time.

V. MISCELLANEOUS

1.0 INDEPENDENT CONTRACTOR:

- 1.1 Contractor shall perform its obligations under this Agreement as an independent contractor and not as an employee of the City.

2.0 FORCE MAJEURE:

- 2.1 Timely performance by both parties is essential to this Agreement. However, neither party is liable for delays or other failures to perform its obligations under this Agreement to the extent the delay or failure is caused by Force Majeure. Force Majeure means fires, floods, explosions, and other acts of God, war, terrorist acts, riots, court orders, and the acts of superior governmental or military authority.
- 2.2 This relief is not applicable unless the affected party does the following:
 - 2.2.1 uses due diligence to remove the Force Majeure as quickly as possible; and
 - 2.2.2 provides the other party with prompt written notice of the cause and its anticipated effect.
- 2.3 The City may perform contract functions itself or contract them out during periods of Force Majeure. Such performance does not constitute a default or breach of this Agreement by the City.
- 2.4 If the Force Majeure continues for more than 30 days, the City Purchasing Agent or Director may terminate this Agreement by giving 30 days' written notice to Contractor. This termination is not a default or breach of this Agreement. CONTRACTOR WAIVES ANY CLAIM IT MAY HAVE FOR FINANCIAL LOSSES OR OTHER DAMAGES RESULTING FROM THE TERMINATION EXCEPT FOR AMOUNTS DUE UNDER THE AGREEMENT AT THE TIME OF THE TERMINATION.

3.0 SEVERABILITY:

- 3.1 If any part of this Agreement is for any reason found to be unenforceable, all other parts remain enforceable unless the result materially prejudices either party.

4.0 ENTIRE AGREEMENT:

- 4.1 This Agreement merges the prior negotiations and understandings of the Parties and embodies the entire agreement of the Parties. No other agreements, assurances, conditions, covenants (express or implied), or other terms of any kind exist between the Parties regarding this Agreement.

5.0 WRITTEN AMENDMENT:

- 5.1 Unless otherwise specified elsewhere in this Agreement, this Agreement may be amended only by written instrument executed on behalf of the City (by authority of an ordinance duly adopted by the City Council) and Contractor. The Director is only authorized to perform the functions specifically delegated to him or her in this Agreement.

6.0 APPLICABLE LAWS:

- 6.1 This Agreement is subject to the laws of the State of Texas, the City Charter and Ordinances, the laws of the federal government of the United States, and all rules and regulations of any regulatory body or officer having jurisdiction.
- 6.2 Venue for any litigation relating to this Agreement is Harris County, Texas.

7.0 NOTICES:

- 7.1 All notices to either party to the Agreement must be in writing and must be delivered by hand, facsimile, United States registered or certified mail, return receipt requested, United States Express Mail, Federal Express, Airborne Express, UPS or any other national overnight express delivery service. The notice must be addressed to the party to whom the notice is given at its address set out in Section I of this Agreement or other address the receiving party has designated previously by proper notice to the sending party. Postage or delivery charges must be paid by the party giving the notice.

8.0 NON-WAIVER:

- 8.1 If either party fails to require the other to perform a term of this Agreement, that failure does not prevent the party from later enforcing that term and all other terms. If either party waives the other's breach of a term, that waiver does not waive a later breach of this Agreement.
- 8.2 An approval by the Director, or by any other employee or agent of the City, of any part of Contractor's performance does not waive compliance with this Agreement or establish a standard of performance other than that required by this Agreement and by law. The Director is not authorized to vary the terms of this Agreement.

9.0 INSPECTIONS AND AUDITS:

- 9.1 City representatives may perform, or have performed, (1) audits of Contractor's books and records, and (2) inspections of all places where work is undertaken in connection with this Agreement. Contractor shall keep its books and records available for this purpose for at least 4 years after this Agreement terminates. This provision does not affect the applicable statute of limitations.

10.0 ENFORCEMENT:

- 10.1 The City Attorney or his or her designee may enforce all legal rights and obligations under this Agreement without further authorization. Contractor shall provide to the City Attorney all documents and records that the City Attorney requests to assist in determining Contractor's compliance with this Agreement, with the exception of those documents made confidential by federal or State law or regulation.

11.0 AMBIGUITIES:

- 11.1 If any term of this Agreement is ambiguous, it shall not be construed for or against any party on the basis that the party did or did not write it.

12.0 SURVIVAL:

- 12.1 Contractor shall remain obligated to the City under all clauses of this Agreement that expressly or by their nature extend beyond the expiration or termination of this Agreement, including but not limited to, the indemnity provisions.

13.0 PARTIES IN INTEREST:

- 13.1 This Agreement does not bestow any rights upon any third party, but binds and benefits the City and Contractor only.

14.0 SUCCESSORS AND ASSIGNS:

- 14.1 This Agreement binds and benefits the Parties and their legal successors and permitted assigns; however, this provision does not alter the restrictions on assignment and disposal of assets set out in the following paragraph. This Agreement does not create any personal liability on the part of any officer or agent of the City.

15.0 BUSINESS STRUCTURE AND ASSIGNMENTS:

- 15.1 Contractor shall not assign this Agreement at law or otherwise or dispose of all or substantially all of its assets without the City Purchasing Agent's or Director's prior written consent. Nothing in this clause, however, prevents the assignment of accounts receivable or the creation of a security interest under Section 9.406 (c) of the Texas Business & Commerce Code. In the case of such an assignment, Contractor shall immediately furnish the City with proof of the assignment and the name, telephone number, and address of the Assignee and a clear identification of the fees to be paid to the Assignee.
- 15.2 Contractor shall not delegate any portion of its performance under this Agreement without the City Purchasing Agent's or Director's prior written consent.

16.0 REMEDIES CUMULATIVE:

- 16.1 Unless otherwise specified elsewhere in this Agreement, the rights and remedies contained in this Agreement are not exclusive, but are cumulative of all rights and remedies which exist now or in the future. Neither party may terminate its duties under this Agreement except in accordance with its provisions.

17.0 CONTRACTOR DEBT:

- 17.1 If Contractor, at any time during the term of this agreement, incurs a debt, as the word is defined in Section 15-122 of the Houston City Code of Ordinances, it shall immediately notify the City Controller in writing. If the City Controller becomes aware that Contractor has incurred a debt, she shall immediately notify contractor in writing. If Contractor does not pay the debt within 30 days of either such notification, the City Controller may deduct funds in an amount equal to the debt from any payments owed to Contractor under this agreement, and Contractor waives any recourse therefor.

EXHIBIT "A"

DEFINITIONS

As used in this Agreement, the following terms have the meanings set out below:

"Agreement" means this contract between the Parties, including all exhibits, change orders, and any written amendments authorized by City Council and Contractor.

"City" is defined in the preamble of this Agreement and includes its successors and assigns.

"City Purchasing Agent" is defined as the person or duly authorized successor, authorized in writing to act for the City. The term includes, except as otherwise provided in this Contract, the authorized representative of the City Purchasing Agent acting within the limits of delegated authority.

"Contractor Administrator" means the representative of the Department who is responsible for the administration for the Contract.

"Contract Award Notice" means the official notification substantiated by the Notice to Proceed issued by the City Purchasing Agent to the Contractor.

"Contract Charges" means charges that accrue during a given month as defined in Article III.

"Contract Term" is defined in Article IV.

"Contractor" is defined in the preamble of this Agreement and includes its successors and assigns.

"Countersignature Date" means the date this agreement is countersigned by the City Controller.

"Director" mean the Directors/Chiefs of each of the Departments or the City Purchasing Agent for the City, or the person he or she designates.

"Effective Date" is defined as date contract is countersigned by the City Controller.

"Governing Body" means the Mayor and City Council of the City of Houston.

"Hazardous Materials" is defined in Article II (Environmental Laws).

"Notice to Proceed" means a written communication from the City Purchasing Agent to Contractor instructing Contractor to begin performance.

"Parties" mean all the entities set out in the Preamble who are bound by this Agreement.

EXHIBIT "B"
SCOPE OF SERVICES

B.00 General Requirements and Scope of Services:

- B.00.01 The Contractor shall furnish all supervision, labor, parts, tools, materials, equipment, supplies, and facilities necessary to provide precise repair services for large submersible pumps from various facilities of the City of Houston. The City will monitor the repair of its submersible pumps on a daily basis.
- B.00.02 The meaning of some specific terms as used in this contract is given in Exhibit A, Definitions.
- B.00.03 The large submersible pumps covered by this contract are grouped to indicate the manufacturer, size, and type of the units. Refer to Exhibit A, Definitions, for the list.
- B.00.04 This contract covers the general requirements for the disconnecting, transporting, reconditioning, rewinding, repairing and/or replacing, installing, and testing of the large submersible pumps located at City of Houston facilities. This includes, but is not limited to, motor stator coils, motor stator iron, motor rotor, pump casing, pump impeller, pump volute, wear rings, bearings, seals, and electrical/mechanical work. This specification defines minimum acceptable requirements for the repair of submersible pumps and documentations the Contractor shall maintain and submit with its invoice for services rendered.
- B.00.04.1 The Contractor shall provide to the Contract Technical Representative (CTR) a list of the Name(s) and Location(s) of ALL shop(s) and subcontractors that will be used for the specified repair work prior to the commencement of any work.
- B.00.04.2 The Contractor shall obtain written approval for each shop and subcontractor before the start of the contract. If the Contractor plans to use any subcontractor not on the list, the Contractor shall obtain written approval from the CTR before subcontracting the work.
- B.00.05 Unless otherwise specified, fabrications, processes, parameters, and test methods for the motors of the submersible pumps shall conform to the latest revision of the following Electrical Apparatus Service Association (EASA) documents and ASTM guide:
- EASA AR100-2010 - Recommended Practice for Repair of Rotating Apparatus (hereafter abbreviated as EASA AR100-2010);
 - EASA Technical Note No. 16 – Guidelines for Maintaining Motor Efficiency During Rebuilding, September 1999 (hereafter abbreviated as EASA Tech Note No. 16)
 - EASA Technical Note No. 17 – Stator Core Testing, updated March 1997 (Hereafter abbreviated as EASA Tech Note No. 17)
 - EASA Bearing Fit Tolerance Chart, updated 1997
 - ASTM E1934-99a(2005e1) – Standard Guide for Examining Electrical and Mechanical Equipment and Infrared Thermography (herein abbreviated as ASTM E 1934)
- B.00.06 All submersible pump repair and services shall be performed in a manner to comply with the applicable sections of standards and codes listed in B.00.05.
- B.00.07 All test equipment required for test results shall be calibrated at a minimum of once a

year, adhering to standards traceable to the National Institute of Standards and Technology (NIST) or equivalent standards laboratories (see EASA AR100-21010). The Contractor shall establish, document, and maintain calibration records for testing and measuring equipment used to demonstrate conformance of product to specified requirements.

B.00.08 The submersible pumps at City facilities are purchased and installed under the City's master specifications (a copy of Master Specifications Section 11311, Submersible Wastewater Pumps, dated 06/28/2005 or latest edition found at the website listed below), requiring compliance with the applicable sections of the following standards and codes.

- American National Standard Institute (ANSI)
- American Society for Testing and Materials (ASTM)
- Anti-Friction Bearing Manufacturing Association (AFBMA)
- Hydraulic Institute
- Institute of Electrical and Electronic Engineers (IEEE)
- National Electric Code (NEC)
- National Electrical Manufacturers Association (NEMA)
- Steel Structures Painting Council (SSPC)
- City of Houston Electrical Code

The website is:

<http://pwecms.cityofhouston.net/documents/forms/11311-submersible-wastewater-pumps/details.html>

B.00.08.1 Performance requirements include, but are not limited, to the following: rewind or recondition, power and control cables, impellers, bearings, drive shaft speed (rpm); vibration; pumping efficiency, total dynamic head, temperature, corrosion resistant paint and primer, control systems (PLC's) and other(s).

B.00.09 Wherever this document refers to the following codes and standards, that specific section of the code/standard shall apply to the repairs being carried out by the Contractor:

- Steel Structures Painting Council (SSPC)
- Anti-Friction Bearing Manufacturing Association (AFBMA)
- American Society for Non-Destructive Testing
- City of Houston Electrical Code
- American Society for Testing and Materials (ASTM)

B.00.10 A copy of Master Specifications Section 11311, Submersible Wastewater Pumps, dated 06/28/2005 or latest edition shall become a part of this services contract.

The website is:

<http://pwecms.cityofhouston.net/documents/forms/11311-submersible-wastewater-pumps/details.html>

B.00.11 The Contractor shall furnish, when requested by the CTR, copies of current environmental permits and demonstrate compliance with current environmental regulations.

B.00.12 The subcontractors to the Contractor are subject to all standards as the Prime Contractor.

B.0012.1 The Contractor shall follow all standard safety practices and demonstrate compliance at all times while performing duties under this contract.

- B.00.13 Contract "Fees and Costs" - Exhibit "H": bid a percentage discount or markup of manufacturer's price list. This list is for pricing only. Contractor may provide new OEM parts or new non-OEM parts for discount bid.
- B.00.13.1 Freight: Freight for special order repair parts and/or repair parts ordered from another state or country is the responsibility of the city. The vendor must provide invoice(s) detailing freight costs with no markup. Freight for all other repair parts is the responsibility of the contract vendor.
- B.00.14 The price of parts and material and cost of a replacement unit supplied for this contract shall be the total original invoiced cost to the contractor plus percentage (%) markup or percent (%) discount for the item as shown in the contract "Fees and Costs" schedule. The Contractor shall submit all ORIGINALS of the supporting documentations with the FINAL invoice.
- B.00.15 All prices for parts and any markup or discount shall be based upon OEM Manufacturer's latest Price List for distributorships. This is applicable to the parts section of the Bid Forms and subsequently will be incorporated into Exhibit "H" entitled "Fees and Costs" of the Contract.
- B.00.15.1 The Contractor may be asked to provide pricing for both OEM and Non-OEM repair parts. At UDR'S discretion, UDR may require contractor to provide pricing to repair or/replace parts with non-OEM parts. Contractor will submit cost estimate within seven (7) working days of the completion of the Disassembly and Inspection (D & I). If not, a written explanation shall be provided.
- B.00.15.2 All rates for any service, parts, and/or material, and work performed by Contractor and/or Subcontractor(s) shall be clearly defined within Exhibit H (Fees and Costs).
- B.00.16 Pricing for a replacement unit supplied under this contract will be based on the Latest Manufacturer's Price List, if applicable.
- B.00.17 All discounts/markups shall be based on actual cost of work performed by contractor and/or subcontractor that was approved and accompanied with actual original invoiced documents.
- B.00.18 At Contractor's repair facility, the Contractor shall teardown and inspect the unit, provide recommendations and prepare a scope of work to repair and/or replace parts with new OEM parts or new Non-OEM parts.
- B.00.19 If the Contractor plans to use any part other than an OEM part, the Contractor shall obtain written confirmation from the CTR. Based on independent testing as set out below that the non-OEM part is equal or of better material and craftsmanship and performance standards, and will not require modification to other parts. The Contractor shall submit specifications and documentation on the proposed substitution.
- B.00.19.1 Upon request by the City, at the expense of the contractor, testing may be required by an independent third party chosen by the UDR. The burden shall be upon the contractor to prove that non-OEM parts meet the required specifications in fit, form and function as OEM parts.
- B.00.19.2 Testing data provided to the city's CTR must show if parts exceed or are

- equivalent to OEM requirements.
- B.00.19.3 All Repair or replacement parts shall equal or exceed specifications for OEM repair or replacement parts.
- B.00.19.4 REJECTION: In the event the City rejects any item, due to the failure of a repaired or replaced pump, Contractor shall have seven (7) business days to repair and install unit at serviceable conditions at no additional cost to the City. If the unit cannot be placed back in service in seven (7) business days, then a written explanation for delay shall be provided to UDR or CTR.
- B.00.20 The City reserves the right to pick up any and all parts that are quoted by the Contractor to be repaired or replaced. This includes (but not limited to) seals, bearings, and other items of a submersible pump unit, per Contractor job number and/or City work order, and equipment release number.
- B.00.21 A City representative shall pickup or the Contractor shall deliver all Non-repairable submersible pumps and the pump's components from the Contractor's facility. Non-repairable units do not need to be reassembled, but shall be labeled and grouped per job number and placed on a skid or container.
- B.00.22 Where hourly work is performed on behalf of the City, the Contractor (and approved sub-contractor) shall fully document the start of the work, the time spent on the job, and completion of each job. The documentation shall be punch card/time-card, shop record or any other mutually agreed method, see Exhibit B10 (Timesheet Report Form).
- B.00.23 RESERVED.
- B.00.24 Wherever torque values are known, the Contractor shall use a torque wrench and adhere to the OEM torque values.
- B.00.25 When requested by the UDR, the Contractor shall furnish parts needed for maintenance activities of submersible pumps by City Personnel. The Contractor shall charge the same price and mark-up or discount for these parts as indicated in Exhibit H – Fees and Costs under "Parts and Material."
- B.00.26 Paint booth shall not be used for sandblasting.
- B.00.27 Upon receipt of the submersible pumps the Contractor shall verify and document all information about the condition of the units including nameplate data. The Contractor shall inspect the unit and document the damaged and missing parts on the teardown report.
- B.00.28 The Contractor shall take digital photographs of each unit upon receiving from the City. In addition, the Contractor shall take digital photographs of all major components within the unit during the tear down that will be included in each Tear-Down Report (Exhibit B1). All photos shall be made available to the City upon request.
- B.00.29 In the case of dual horsepower units, charges shall be based only on the higher horsepower rating, never on both.
- B.00.30 Any equipment removed from City property shall be documented on a City Equipment Release Authorization Form, refer to Exhibit B5. The department requesting services shall provide the form. The user department shall adjust the form to reflect the Contract, Ordinance and Service Release Order (SRO) numbers pertaining to this Contract.

- B.00.31 The Contractor shall provide a list, to the City of the name(s) and location(s) of shop(s) that will be used for specified repair work and obtain written approval before start of the contract. After the start of the contract, any additional subcontractor must be approved prior to commencement of work. The Contractor shall submit information on the subcontractor with a brief description and explanation of the addition. This addition will not take effect until written approval from the CTR is obtained.
- B.00.32 All metal parts shall be checked for structural integrity and cracks, and shall be repaired or replaced to meet required codes as well as industry and performance standards.
- B.00.33 Terminal boxes and auxiliary equipment enclosures shall be made to meet OEM's specifications.
- B.00.34 All illegible or defective nameplates shall be replaced upon completion of repair. All original nameplate information shall be stamped back onto the new nameplate (when applicable). Also, the new nameplates shall be permanently attached with mechanical fasteners.
- B.00.35 The Contractor shall install a stainless steel identification tag stamped with the contractor's name, job number, and repair date on each submersible pump. The tag shall be secured with stainless drive pins.
- B.00.36 All submersible pumps with peeling paint or rust shall be sandblasted, primed and painted. The cost of sandblasting shall be included as a part of the base cost of any recondition-repair or rewind-repair.
- B.00.37 Assembled submersible pump units shall be tested for vibration. The vibration level shall not exceed 0.1 inches per second unfiltered. The vibration measurements shall be recorded on the final test sheet. For single vane impeller the vibration level shall not exceed 0.2 inches per second unfiltered.
- B.00.37.1 The vibration levels shall be specified by the OEM. If needed, the City will assist the Contractor to obtain the OEM data from the manufacture(s).
- B.00.38 The City of Houston forms Exhibit B1 – B11 [Teardown and Recommended Repair Report (Exhibit B1), U. L. Certification Form (Exhibit B2), Shop Acceptance Tests Form (Exhibit B3), Field Acceptance Tests Form (Exhibit B4), Equipment Release Authorization Form (Exhibit B5), Recommended Repair Estimate Form (Exhibit B6), Fits and Indicated Runout (Exhibit B7), Progress and Status Report Form (Exhibit B8), Invoice Checklist Form (Exhibit B9) and Timesheet Report Forms (Exhibit B10) and Preventative Maintenance (PM) / Predictive Maintenance (PdM) Form (Exhibit B11), Certificate of Warranty Form (Exhibit B12)] included in this document shall be used on each recondition-repair, rewind-repair, and new submersible pump purchases.
- B.00.39 Steam clean area shall be so designed with all the run-offs captured into an approved oil/grease recovery system at the Contractor's facility.
- B.00.40 Delivery tickets and packing slips will contain quantity, part number, description of commodity delivered, name of department or section, facility name to which the merchandise originated from, the City of Houston Ordinance, Contract and SRO numbers, signature of UDR, signature of receiving employee, printed names, employee number, date received and the authorization release number.
- B.00.41 The repair shop must be able to verify all hours charged for machine work. This will

apply to work done by the Contractor and/or its subcontractor(s). The hours worked on the City's equipment shall be supported with time cards when applicable to hourly rates. The original time cards shall be submitted with final invoice.

- B.00.42 The City reserves the right to review all payments made to the Contractor by auditing any and all documents associated with this contract over the contract period and two years after expiration of the contract. Subject to such audit, any overpayments shall be recovered from the Contractor.
- B.00.43 The Contractor shall be responsible for storage of the submersible pump units and all parts. Any parts lost or damaged while in the possession of the Contractor shall be repaired or replaced at the Contractor's expense.
- B.00.44 The base price, before mark-up/discount of parts supplied for this contract is the total actual cost of the item for which the Contractor shall provide documentation.
- B.00.45 Upon completion of any repair work the Contractor shall provide to the City, a full set of completed teardown sheets which details the work performed on the unit, test results and data sheets. The Contractor shall also include, but is not limited to the electrical, machinist and mechanical report, and winding data report.
- B.00.46 The Contractor shall establish and maintain records of the repair and services performed for at least 2 years after contract expires and also at least three (3) years after the pump is returned repaired (EASA AR100-2010, Section 1.3.2 or latest edition).
- B.00.47 The repaired unit shall pass inspection and/or test(s) with defined acceptance criteria (EASA AR100-2010, Section 4 or latest edition).
- B.00.48 All inspection, cleaning, balancing, disassembly, reassembly, winding, dipping, baking, sand-blasting, painting, cost of nameplates attached to each pump, cost of each name tag, vibration, electrical and other associated testing and document preparation shall be included as part of the unit cost for recondition, rewind or replacement.
- B.00.48.1 The Contractor cannot combine the unit cost listed on the Fee Schedule for work performed on one pump for recondition, rewind or replacement. However, the Contractor may change to a different unit cost with written approval from UDR and/or CTR for one of the unit costs on the Fee Schedule.
- B.00.49 In the event the contractor cannot recondition-repair and/or rewind-repair the motor, the City permits, with CTR's written approval, the contractor to purchase a OEM reconditioned or remanufactured motor for its submersible pumps from the manufacturer.
- B.00.50 The REWIND-REPAIR cost in the "Fees and Costs" Schedule does not include the cost of bearings, seals, impellers, wear-rings, heaters, broken and damaged parts. The cost of the bearings, seals, impellers, wear-rings, heaters, broken and damaged parts are reimbursable, if authorized for repair by the UDR and/or CTR. These components are purchased to support the repair of the motor within each submersible pump.
- B.00.51 Contractor shall provide monthly status reports for the contract period (See Exhibit B8 - Progress and Status Report).
- B.00.52 The Contractor facility shall be subject to inspection with a forty-eight (48) hour advance notice to verify that the equipment and personnel deemed necessary to perform the type of repair services required under this contract are in place at the time of inspection.

- B.00.53 Additional services are not an optional task as it is considered a part of the normal Scope of Services. Additional services required to bring submersible pump(s) back in service are an obligatory task to be performed by the Contractor and/or subcontractor, with an associated "Fees and Costs" Schedule (Exhibit H – Fees and Costs) to capture the cost of services not performed by the Contractor.

B.01 Explosion-Proof Submersible Pump Units (Suitable for NEC Class I, Division I, Group D)

Repair of Underwriters Laboratory (UL) approved explosion-proof submersible pump. Repair of Factory Mutual (FM) approved explosion-proof submersible pump.

- B.01.01 The repair of Underwriters Laboratory (UL) explosion-proof submersible pumps shall be performed in a UL approved shop by skilled submersible pump mechanics that are familiar with repair practices typical to explosion-proof submersible pumps, or at a minimum pump motors shall be UL certified by a UL approved shop.
- B.01.02 The repair of Factory Mutual (FM) explosion-proof submersible pumps shall be performed in a "Factory" approved shop by skilled pump mechanics that are familiar with repair practices typical to explosion-proof submersible pumps.
- B.01.03 Only OEM parts are allowed in the repair of UL explosion-proof units, except for bearings and seals. NO OTHER EXCEPTION.
- B.01.04 Only shafts and seals can be reworked for a repair of UL explosion-proof units.
- B.01.05 Only OEM parts are allowed in the repair of FM explosion-proof units, except for bearings and seals. NO OTHER EXCEPTION.
- B.01.06 Only shafts and seals can be reworked for a repair of FM explosion-proof units.
- B.01.07 Any casted component of the explosion-proof submersible pump unit that is damaged shall be replaced.
- B.01.08 The repaired "UL" unit shall be certified by a UL inspector.
- B.01.09 The shop shall provide the City with a copy of the "UL" re-certification document. The certificate shall bear the UL file number.
- B.01.10 In the event a UL-certification tag is not present on a pump at the time of delivery of the pump to the contractor's shop, a UL-Recertification is not required. However, the contract shall provide twelve (12) month warranty as outlined in B.12, Warranties section of referenced contract.

B.02 Repair and Replacement

- B.02.01 The Contractor shall inspect, repair, and/or troubleshoot assemblies and subassemblies of the submersible pumps in lieu of replacement unless the repair cost of the electric submersible pumps exceeds seventy (70) percent of the cost for replacing it with a new item. Generally the seventy (70) percent rule applies, but the City reserves the right to purchase or repair units based on submersible pump economic evaluation and various operational considerations.
- B.02.02 The CTR must approve, in writing, the purchase of a new unit in lieu of repair.

- B.02.03 The Contractor shall obtain three (3) quotes for items estimated to cost more than \$50,000.00, when applicable. The City of Houston has the option of accepting the lowest and best quote. The City reserves the right to solicit quotes for replacement items.
- B.02.03.01 If the equipment is a sole source item, vendor shall obtain a "signed" and dated letter from the manufacturer stating so. This letter shall list the sole distributor for the Houston Metropolitan area. The manufacturer's letter is valid for thirty (30) days.
- B.02.04 Replacement unit shall be identical to the unit being replaced. If the identical unit is no longer offered by the manufacturer, the replacement unit shall have the same pump performance characteristic and similar physical dimensions as the one being replaced and shall be of the "Highest Efficiency" submersible pump(s) available. Replacement shall be authorized in writing by the CTR.
- B.02.05 The replacement unit must meet the minimum specification requirements and be equal or better in material, craftsmanship, and performance as the replaced pump.
- B.02.06 The replacement unit provided must be able to fit the facilities existing pump mounting and railing system without any required modification to the facility. The City reserves the right to request a specific pump that may require facility modification.
- B.02.07 The Contractor shall use the mark-up or discount in the Contract Fees and Costs (Exhibit H) under "Cost to Replace a Unit".
- B.02.08 If the unit is not repaired or replaced, then the unit shall be deemed "Non-Repairable" The Contractor shall invoice the City per the fee schedule item "Non-Repairable Cost." This cost shall include, but not limited to digital photos, tear-down and/or the D & I.
- B.02.09 The Contractor is responsible for ordering the correct parts and/or replacement unit, within five (5) days of the acceptance of the signed approval sheet from the UDR or CTR. The confirmation of each order shall be provided in writing from the Contractor to the UDR.
- B.02.09.1 If parts and/or replacement unit has NOT been ordered within the specified time (5 days) a five-percent (5%) discount shall be applied to the final invoice amount each (business) day the part was not ordered unless written proof (reason for delay) is provided by the Contractor via distributor and/or manufacturer. The deduction shall not exceed fifteen percent (15%) of the final invoice amount.
- B.02.09.2 If Contractor orders the incorrect part(s) and/or incorrect replacement unit that may cause a delay in delivery of completely assembled unit, then a fifteen percent (15%) deduction of the final invoiced amount shall be assessed as liquidated damages.

B.03 Specific Tasks and Scope of Work

- B.03.01 In the event the User Department chooses to use City of Houston's trucks for transporting the pump to and/or from the Contractor's facility, then no transporting fee shall be assessed to the City. If the Contractor transports the pump, then the Contractor shall furnish hoist, crane, and other services associated with loading and/or unloading the unit.
- B.03.02 The Contractor shall chemically and mechanically clean all external surfaces, as

- required.
- B.03.03 The Contractor shall perform electrical tests, with measurement recorded in the Teardown Report. These include but are not limited to:
- Insulation resistance to ground, in meg-ohms, of windings and accessories.
 - Surge-comparison of winding
 - Growler test
 - Thermal Imaging Test
- B.03.04 The Contractor shall measure insulation resistance to ground of windings and accessories with a 500 – 1,000 Volt meg-ohm meter (EASA AR100-2010 4.2.1).
- B.03.05 In the event that insulation resistance of the windings is below the recommended minimum value, the motor shall be disassembled, and the windings shall be cleaned and dried before surge-comparison testing.
- B.03.06 The Contractor shall disassemble submersible pump units and clean all internal parts unless otherwise specified and shall be included within base cost of Recondition or Rewind.
- B.03.07 The Contractor shall inspect all components of the submersible pump units and all critical areas to determine if clearances are within OEM tolerances, and the parts meet manufacturer's specifications.
- B.03.08 The Contractor shall inspect the unit and its shaft for corrosion, erosion, chipping, scoring, and other damages and shall record this observation on the teardown report.
- B.03.09 The Contractor shall inspect the rotor shaft for "roundness/runout" and determine if it is within OEM tolerance.
- B.03.10 The Contractor shall inspect the pump casing, impeller, shaft sleeve, and wear rings for corrosion, erosion, chipping, scoring, and other damages and shall record this observation on the Teardown Report.
- B.03.11 The Contractor shall inspect the shaft extensions and key seats (keyways). Shaft extensions dimensions shall be checked and shaft must be smooth, polished, and concentric with shaft center.
- B.03.12 The Contractor shall inspect each bolt for damaged threads.
- B.03.13 Repair shall include from: sandblasting, welding and machining as required. Other services required of the Contractor shall include Non-Destructive Testing (NDT), chroming and metalizing if and when required.
- B.03.14 The core iron, if needed, may be grit blasted with glass beads, walnut shells, corncobs, or similar materials. It shall not be blasted with silica, garnet, or other grits, which may cause shorts between laminations (EASA Tech Note 16).
- B.03.15 The Contractor shall determine what parts are to be machined or replaced with new parts. As a minimum the Contractor shall replace all bearings and seals when the original unit was furnished with such items.
- B.03.16 Within seven (7) working days of receipt of the pump, the Contractor shall teardown and inspect the pump and prepare the Teardown and Recommended Repair Report (Exhibit B1). The report shall include a brief root cause failure explanation. In addition, the report

shall include, but not limited to the following:

- Control and Power Cable Readings
- Cable Length and Conditions
- Conditions of Impeller / Volute
- Condition of Wear-Ring
- Megging of Motor
- Condition / Presents of Nameplate
- Motor Conditions (Rotor / Stator)
- Conditions of Shaft / Bearings / Seals
- Pump's (Manufacture / Model / Serial Number)
- Digital Photos
- Facility Location

Within seven (7) working days of submitting the Teardown and Recommended Repair Report, the Contractor shall submit the Recommended Repair Estimate Form (Exhibit B6). The Repair Estimate Form shall include the description of parts or components proposed to be repaired and/or replaced. In addition, the cost for each replacement unit shall be included on each estimate. Provide part numbers, original price listing before mark-up or discount and sub-total after mark-up or discount. The Contractor shall disclose the cost of new OEM / Non-OEM parts versus reconditioned OEM / Non-OEM part(s) on the cost estimate.

B.03.16.1 If the Teardown and Recommendation Repair Report has not been completed and submitted within seven (7) business days of the contractor receiving the submersible pump, a five-percent (5%) discount shall be applied to the contractor's final invoice amount for each (business) day the unit has not been torn down, inspected and the Teardown Report (Exhibit B1) has not been submitted to the City's Representative. The deduction shall not exceed fifteen percent (15%) of the contractor's final invoice amount.

B.03.16.2 If the Repair Estimate is not provided within the specified time, a five-percent (5%) discount shall be applied to the final invoice amount each (business) day the Repair Estimate has not been submitted to the City's Representative. The deduction shall not exceed fifteen percent (15%) of the final invoice amount.

B.03.16.3 Each maximum penalty due to delays (i.e. Teardown and Recommended Repair Report, Repair Estimate and Ordering Incorrect Parts and/or Incorrect Replacement Units due to Contractors negligence) shall not exceed a combined value of fifteen percent (15%) discount to the final overall Invoice to the City of Houston.

B.03.17 The UDR may inspect the torn-down unit, review the Contractor's proposed work scope and cost estimate. If the cost exceeds the budget per fiscal year, the UDR shall revise the scope and have the Contractor submit another cost estimate within five (5) days.

B.03.18 Upon written acceptance of cost estimate by the UDR, the Contractor shall proceed with repairs. The Contractor shall commence to work on the unit and complete the repair within the allocated time for delivery of such item:

B.03.18.1 Submersible pumps 125 HP to 250 HP, 10 weeks

B.03.18.2 Submersible pumps \geq 250HP to 450 HP, 12 weeks

- B.03.18.3 Submersible pumps \geq 450HP to Greater HP, 14 weeks
- B.03.19 The Contractor shall notify the UDR immediately in writing if the Contractor cannot complete the job within the contractually agreed time period for the unit.
- B.03.20 The Contractor shall submit to the UDR a written detailed explanation for the delay with new documentation to complete the job. If additional work is required, the Contractor shall submit explanation before commencing the additional work.
- B.03.21 At all times during the repair process, the Contractor shall maintain the City's equipment in a clean and weather protected storage area.
- B.03.22 The rotor assembly shall be checked for total indicated run out and recorded on the rotor information sheet. The check shall be carried out in precision "V-Blocks."
- B.03.23 Shaft seal surface and bearing journals, shall be micrometer checked and results shall be recorded on the rotor information sheet within the D&I Report.
- B.03.24 The critical dimensions of the end bells and bearing housing shall be micrometer checked and recorded on the mechanical inspection sheet within the D&I Report.
- B.03.25 The above measurements shall be submitted to the UDR, along with the electrical and mechanical data sheets, during the teardown inspection.
- B.03.26 Replacement bearings shall have an L_{10} rating life in accordance with ANSI/AFBMA of at least 40,000 hours of service life. If the existing bearings have exceeded L_{10} rating life (40,000 hours), then the Contractor shall replace the bearing with the same L_{10} rating life bearing as the existing one.
- B.03.27 The Contractor shall ensure the quality of varnish in the Dip Tank and the VPI system by sampling and testing the varnish in the DIP Tank/VPI system every three months. The Contractor shall have the varnish quality reports available for review by the City Inspection Team and the UDR.
- B.03.28 After parts have been repaired, the Contractor shall put together and balance the rotating assembly. The Contractor shall balance the rotor first, and then balance the assembled rotor and impeller.
- B.03.29 The Contractor shall reassemble the submersible pump unit seal, paint and test as required.
- B.03.30 Surface of all RECONDITION-REPAIR and REWIND-REPAIR units shall be prepared for painting to white metal finish by blast cleaning to surface preparation standards and specifications (SSPC-SP5).
- B.03.31 Surface of all RECONDITION-REPAIR and REWIND-REPAIR units shall be primed and finished, in an approved paint booth, using the unit manufacturer's standard epoxy painting system:
- The minimum primer coat thickness shall be 3 mils DFT, dry film thickness (DFT).
 - The minimum finish coat thickness shall be 6 mils DFT, dry film thickness (DFT).
- B.03.32 If the manufacturer's "standard epoxy painting" information is not available, the following industrial coating specification for surface of pumps and equipment shall be followed:
- The primer and finish coats shall be two-component, rust-inhibitive, polyamide-cured epoxy coating with a recoatable finish.
 - The prime coat shall be Ameron 38P, Tnemec 69, or equal.

- The finish coat shall be Ameron 38S, Tnemec 69, or equal.
- B.03.33 Changes to paint specifications (item B.03.29, B.03.30 and B.03.31) shall be approved by the UDR prior to application of paint.
- B.03.33.1 The paint color shall be as the OEM standard for such units unless specifically requested otherwise, in writing by the CTR.
- B.03.34 The user department will specify the paint color.
- B.03.35 Whenever needed, OEM or approved substitute specified lube/cooling oils, or equal, shall be used in the oil chamber. The lube/cooling oils shall be biodegradable, nontoxic, and FDA approved.
- B.03.36 Greases and/or Lubricants used on bearings shall be OEM specified or approved equal.
- B.03.37 All electrical work for RECONDITION-REPAIR and REWIND-REPAIR of the units shall be in accordance with Item B.04.02 (Recondition) and B.04.03 (Rewind).
- B.03.38 Before disassembly and inspection (D & I Report) nameplate data shall be verified, all missing or damaged parts shall be identified in writing, recorded, and special items shall be noted on the inspection form.
- B.03.39 RESERVED.
- B.03.40 The field TIME SHEETS should be signed DAILY by the UDR at the facility location, however if UDR and/or CTR is not present, then timesheet can be signed by City employee (with Employee ID #) at designated facility where work was performed. ALL TIME SHEETS shall be approved by the UDR and/or CTR on the last working day of each week.
- B.03.41 The Contractor shall be responsible for, but not limited to disconnecting, transporting, disassembling and inspecting (D&I), repairing, aligning to drive-shaft, replacing and installing submersible pumps along with any necessary associated equipment.
- B.03.42 In the event the contractor cannot repair and/or replace the submersible pump, the City permits, with CTR's written approval, the Contractor to purchase a replacement unit from the manufacturer that include new, reconditioned and/or remanufactured submersible pumps according to OEM specifications based on the needs of each facility or location.
- B.03.43 The Contractor shall perform Preventative Maintenance (PM) and/or Predictive Maintenance (PdM) on submersible pumps on an as needed basis per facility. A PM and/or PdM schedule shall be provided in writing to the UDR, whom will coordinate with the City for pumping station shutdown and/or availability.
- B.03.43.1 The Contractor shall be responsible for pump disconnection and/or connection, crane rental and other associated items to conduct PM's and/or PdM's. The labor and material will be captured by the existing Fee Schedule (Exhibit H).

B.04 Motor Inspection and Repair

B.04.01 Motor Inspection and Repair - GENERAL

- B.04.01.01 The Contractor shall provide a repair data sheet showing the condition of the motor upon receipt, the repair work done and the final test results.
- B.04.01.02 During disassembly, the motor shall be visually inspected to determine cause of failure, including electrical and/or mechanical failure. Stators shall be removed from the housing.
- B.04.01.03 Stator winding phase to ground insulation shall be checked with a 500 – 1,000 Volt Megger and the results noted on the inspection form.
- B.04.01.04 Stator winding shall be checked for shorts using surge-comparison tests and all values recorded.
- B.04.01.05 The rotor assembly shall be inspected for wear, scoring and cracks. Checking for open rotor bars shall be done using, but not limited to growler and magnetic paper. Enhanced testing of rotor bars can be done using infrared thermography per B.00.05
- B.04.01.06 All stators that are to be rewound shall be core loss tested. This test shall be done after windings are removed and before burnout. The results shall be submitted to the UDR.
- B.04.01.07 Shaft seal surface, bearing journals and coupling fit, shall be checked with a micrometer and recorded on the rotor information sheet.
- B.04.01.08 The insulating material in the rewinding of the unit shall have a Class “F” rating or better.
- B.04.01.09 Recondition, Rewind: A standard recondition (Section B.04.02) or rewind (Section B.04.03) is described in their respective sections and either standard recondition or rewind fees will apply. However, any additional parts, material or labor beyond the normal scope of work shall be considered additional cost.

B.04.02 Motor Inspection and Repair-RECONDITION - REPAIR

- B.04.02.01 Motors that have been designated for winding reconditioning (and have been thoroughly cleaned free from dirt, grit, grease, oil, and properly dried) shall be inspected for winding damage and recommended repairs shall be made to damaged areas upon approval.
- B.04.02.02 Damage to the windings shall be recorded and submitted to the UDR.
- B.04.02.03 Motor insulation shall be washed with hot soapy water at 200 degrees Fahrenheit and at 30 PSI (Pounds per Square Inch) and then with fresh water. After cleaning, unit must be baked between 250 and 275 degrees Fahrenheit until an acceptable insulation level is obtained.
- B.04.02.04 Reconditioned motors shall receive a minimum of two (2) dips and baked in insulating resin. Stator shall be baked at insulation resin manufacture’s recommended temperature and time to assure full curing. Stator shall be

- removed from housing for this process.
- B.04.02.05 The Contractor shall provide a cost estimate in writing to the CTR to recondition any motor that is greater than 450 HP and/or considered high-voltage rated, if the scope of work differs from all the basic Recondition Repair.

B.04.03 Motor Inspection and Repair – REWIND - REPAIR

- B.04.03.01 The stator core shall be vertically set in the burnout oven. After burnout and winding removal, the core and frame shall be allowed to cool by natural convection without forced air to avoid overstress or warping. Maximum burnout temperature shall be 650 degrees "Fahrenheit" to avoid damage to laminations.
- B.04.03.02 Torch heating shall NOT be used for stator clean up.
- B.04.03.03 The stator core shall be blasted to a bare metal finish. Refer to Item B.00.05 of these specifications for the type of grit permitted for blasting.
- B.04.03.04 The core shall be thoroughly cleaned; the stator core shall be examined for lamination damage such as fusing or metal loss due to arcing.
- B.04.03.05 Fused laminations shall be separated either by grinding or filing. Bent laminations shall be realigned and all protrusions into the slot area shall be filed or ground smooth. Stator cores shall not be re-stacked without the UDR's approval.
- B.04.03.06 Before a new winding is installed in a stator the winding data shall be verified to assure that an original factory equal winding is being installed. If the manufacturer's data is not available, the winding data shall be verified to assure it conforms to the relevant EASA standard(s).
- B.04.03.07 Coils shall be formed with the same number of turns as the original winding. Resistance of the rewound stator shall be the same as the original winding.
- B.04.03.08 Coils shall be machine wound with sufficient wire tension to obtain freedom from crossovers and uniform cross-section coils.
- B.04.03.09 Stator winding extensions shall be shaped to ensure adequate winding clearance on motor reassembly.
- B.04.03.10 Phase insulation shall be installed between phase coils, prior to coil lacing, to minimize phase-to-phase contact. Separators shall be installed between the top and bottom coil in the core slots.
- B.04.03.11 Pre-formed slot wedges shall be used to secure the winding in the stator slot, with shim material as necessary to assure tightness.
- B.04.03.12 After the winding is complete; a thorough inspection shall be performed to ensure the slot insulation overhangs the core slot edges and is not broken or torn at the core slot edges.
- B.04.03.13 All winding and lead connections shall be brazed with a "silver content" rod and insulated with Class "F" insulation or better.

- B.04.03.14 The winding, connections and leads shall be securely laced to form an integral assembly with adequate physical clearance to ground as required by applicable codes and specifications.
- B.04.03.15 All leads brought into the connection box shall be numbered and equipped with a compression lug with NEMA standard bolt hole.
- B.04.03.16 The finished stator winding insulation to ground shall be checked with a 500 – 1,000 Volts Megger. The minimum acceptable insulation resistance reading shall be 10 mega-ohms.
- B.04.03.17 The completed stator shall be preheated in a temperature-controlled oven to the varnish manufacturer's recommendation, not to exceed class "F" operating temperature and shall be held at this temperature for one (1) hour.
- B.04.03.18 Stator shall be allowed to cool by natural convection to the temperature required by insulation resin manufacturer prior to being dipped in insulating varnish.
- B.04.03.19 Stator shall be dipped three (3) times in insulating varnish, repeating processes of items B.04.03.17 and B.04.03.18.
- B.04.03.20 Random-Wound / Form-Wound stators shall go through dip tank process. However, vacuum pressure impregnation (VPI) process shall be an additional cost not to be included into standard Rewind Repair Cost (when applicable).
- B.04.03.21 Baking shall be done in a temperature controlled and force ventilated oven to allow a complete and uniform cure per pump manufacturer's specifications.
- B.04.03.22 Resin shall be completely removed from the stator frame to mechanically fit the outer paint surfaces, and the inner bore of the stator.
- B.04.03.23 The Contractor shall provide a cost estimate in writing to the CTR to recondition any motor that is greater than 450 HP and/or considered high-voltage rated, if the scope of work differs from all the basic Rewind Repair.

B.05 Standard Response Times

- B.05.01 Contractor shall be accessible to the City via telephone during normal business hours. The Contractor shall be ready to start work on any unit within twenty-four (24) hours of receiving the call for the service.
- B.05.02 The Contractor shall be available and accessible to the City via telephone to work overtime and/or emergency per the request of the UDR within six (6) hours of initial contact from UDR and/or CTR.
- B.05.03 The Contractor shall start an emergency job immediately, without scheduling delays, and will not be restricted to normal working hours. The UDR shall coordinate the emergency and overtime work approved by CTR.

B.06 Repair Technicians

- B.06.01 The Contractor's repair technicians shall be qualified, properly trained in repair-recondition of submersible pumps of the type and sizes specified for this contract.
- B.06.02 The Contractor shall have at least one senior repair technician with a minimum of five (5) years' experience in repair and/or overhaul of submersible pumps specified in this contract.
- B.06.03 The Contractor shall furnish the resume of the Senior Pump Technicians to the City Inspection Team during the Team's visit of the Contractor's facility.
- B.06.04 These requirements shall apply to all of the sub-contractors who work for the Contractor.
- B.06.05 The Contractor shall furnish the resume of the technicians to the City inspection team during the team's visit of the Contractor's and/or approved Subcontractor's facility. The Contractor shall provide a resume for any new or old employees (Submersible pump Technicians) to the UDR and/or CTR, who will be working on submersible pumps throughout the duration of this contract.

B.07 Repair Facility (Prime Contractor) Minimal Requirements

- B.07.01 The Contractor shall provide proof of previous experience of repairing large submersible pumps of the similar make and size as specified within Exhibit A (Item #4).
 - B.07.01.1 Written proof from previous clients shall be provided in the form of a written recommendation outlining scope of work, submersible pump type and size of work performed during site evaluation coordinated through City Purchasing Agent (Strategic Procurement Division).
- B.07.02 The Contractor shall have a minimal of 5 years' experience as an submersible pump contractor who has repaired and/or replaced similar make and size submersible pumps as specified within Exhibit A.
 - B.07.02.1 The workflow shall be detailed during the City of Houston's site inspection to demonstrate core competency of submersible pump repairs.

B.08 Shop Acceptance of Repair

- B.08.01 The UDR shall thoroughly inspect the repaired unit before the performance test can begin. It is the Contractor's responsibility to ensure communication has been established with the UDR for witnessing of the performance test.
- B.08.02 All control sensing devices shall be checked to ensure they meet the OEM specifications. The control sensing devices shall include (but are not limited to) thermal sensors, moisture sensors, and thermistors.
- B.08.03 Insulation resistance testing shall be completed before conducting high-potential test using a 500 – 1,000 Volts meg-ohm meter.
- B.08.04 Perform high-potential test of windings (replacement or reconditioned) as stated in EASA AR100-2010, Item 4.4 High-Potential Tests.
- B.08.05 No load test run of the submersible pump shall be performed at its highest rated voltage and frequency.

- B.08.06 Contractor shall perform full load test at its location with City of Houston personnel-UDR and/or CTR present.
- B.08.07 The submersible pump unit shall be securely mounted to a leveled metal base-plate or set on standard rubber isolation pads while vibration readings are taken.
- B.08.08 Vibration level measurements shall be taken on the completely assembled unit at the bearing housings (Drive-End and Opposite Drive-End: horizontal, axial and vertical positions) adjacent to the shaft. The vibration level limits set in section (B.00.37) shall not be exceeded.
- B.08.09 If deficiencies are detected, the repair work shall be rejected and the Contractor shall make the necessary repairs, adjustments or replacements.
- B.08.10 After corrective actions are made, the unit shall go through a new test run before the submersible pump is accepted.
- B.08.11 A typed copy of the Repair Data Sheets covering results of specific tests such as rotor balance, vibration measurement, electrical testing results, mechanical measurements, rewinding data, and final test sheets shall be included with the shipment of all repaired submersible pumps units, per the UDR's request.
- B.08.12 The City shall not make any payment to the Contractor until all corrective actions are made, testing is performed and the equipment repair is accepted.
- B.08.13 The Contractor shall torque bolts from motor housing to volute and this value is to be recorded on the city's Shop acceptance Test Form (Exhibit B3).

B.09 Silence of Specifications

- B.09.01 The apparent silence of these specifications as to any detail, or apparent omission of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practice is to prevail and that only material and workmanship of the finest quality are to be used. All interpretations of these specifications shall be made on the basis of this statement.

B.10 Labor Rate

- B.10.01 The labor rate shall include ALL costs for a qualified person to work on and repair the City equipment including wages, all company benefits, and company profit. No separate labor costs shall be charged for these services.
- B.10.02 All labor hours performed at Contractor's and/or Sub-Contractor's facility shall be supported with original time-cards and/or time-sheets along with final invoice.
- B.10.03 Contractor's labor hour at City facilities shall begin when Contractor arrives at City of Houston facility and ends when Contractor leaves the City facility.

B.11 Additional Services

- B.11.01 Prior to commencement of any Additional Services, the Contractor shall submit a written proposal for approval by the CTR describing the work to be done and include an "Not To Exceed" estimate of the cost. The proposal shall include as a minimum a list of repairs, sub-contractor(s), schematics(s), design plans and a schedule of the repairs. Additional work shall not be performed without written approval from the CTR.

B.11.02 Contractor shall perform Additional Services using the unit rates and any applicable markup/discount in Exhibit "H"- Fees and Costs of the contract as specified for the type of service provided. If the contract "Fees and Costs" schedule does not cover the work needed, the Contractor shall submit detailed cost estimate for such item for review and approval by the CTR.

B.11.03 Additional Services are required services within the general scope of work to ensure each pump and/or pumping station meets and/or exceeds the minimal pumping capacity requirements. The Contractor shall perform these services when requested by the UDR and approved by the CTR. The fees associated with the additional services shall be captured in the Exhibit H - Fees and Costs (Misc. & KSB Pumps Mark-Up, see Item No. 3 in e-bidding system.)

B.12 Warranties

B.12.01 The Contractor shall observe the highest standards of diligence and care in the performance of repair services and shall meticulously follow the standards and procedures required by the equipment manufacturer.

B.12.02 The Contractor further warrants that all service and replacement parts it provides shall be in strict compliance with all applicable regulations.

B.12.03 The Contractor shall fully warrant its installation, replacement, repair and maintenance of all parts and equipment from the date of acceptance by the City of Houston for a twelve (12) month period. Refer to Exhibit B12 – Certificate of Warranty.

B.12.04 During the warranty period ALL related work shall be started by Contractor within twenty-four (24) hours of delivery and shall be repaired within the previously stated time frame B.03.18.

B.12.05 During the warranty period ALL failed units shall be re-repaired or replaced at the Contractor's expense if failure occurs under normal operating conditions and if the failure is due to faulty parts or workmanship.

B.12.05.01 Definitions: "Acceptance" as used in this clause, means the act of a City authorized representative approving specific services, as partial or complete performance of the contract. "Correction" as used in this clause, means the elimination of a defect.

B.12.05.02 If the Contractor is required to correct or re-perform, it shall be at no cost to the City, and any services corrected or re-performed by the Contractor shall be subject to this clause to the same extent as work initially performed. If the Contractor fails or refuses to correct or re-perform, the City may correct or replace with similar services and charge to the Contractor the cost incurred by the City or make an equitable adjustment in the contract price.

B.12.06 Notwithstanding inspection and acceptance by the City or any provision concerning the conclusiveness thereof, the Contractor warrants that all products and services performed under this contract will, at the time of acceptance, be free from defects in workmanship and conform to the requirements of this contract. The City shall give written notice of any defect or nonconformance to the Contractor within the warranty period from the date of acceptance by the City and the Contractor. This notice shall state either (1) that the Contractor shall correct or re-perform any defective or non-conforming product(s) and service(s) at no additional cost to the City, or (2) that the City does not require correction